New Hampshire Climate Change Action Plan
2nd Task Force Meeting
Stonyfield Farm
1050 Perimeter Rd, Manchester, NH 03103
March 10, 2008 - 10 AM – 3 PM

Presentation by Gary Hirshberg, CEO Stonyfield Farm
The presentation is available on the NHDES website.

- Mr. Hirshberg welcomed the Task Force and gave a presentation on Stonyfield Farm's energy conservation and greenhouse gas (GHG) reduction initiatives. He stated that each effort has made his company more profitable and more competitive. He suggested that reducing GHG emissions statewide could improve NH's overall competitiveness on the national and international levels.

Working Group Updates - NHDES Facilitators

The following notes relate the points discussed following the individual updates provided by the facilitators for each of the Working Groups. The presentation materials are available as part of the Facilitators' Handout and Presentation Slides on the NHDES website.

General Conclusion: The reports were well received by the Task Force. The Task Force members seemed to generally agree with the direction that each group was taking, but did pose a few questions and make a few general observations that are summarized below.

- *Sherry Godlewski, Adaptation (ADP)*
  - The Task Force noted that the actions identified suggested the potential for synergies between groups and, therefore, the need for communication and cross-fertilization among and between Working Groups.
  - There was also a suggestion that the Working Group needs to identify which of the adopted measures should be implemented at the local level to ensure that those actions are appropriately communicated.
  - For the integration of Climate Change guidelines into building codes, there was clarification that "building codes" applied to external design elements such as storm water management practices and not just to energy codes and building structural design. Similar comprehensive codes have been adopted in the city of Keene.
  - It was noted that the final actions should include the integration of the emergency response organizations.
  - When advocating upgrades to the built environment, it was suggested that there be caution in terms of "hardening" the coastal environment, when maintaining and restoring ecological features may be more appropriate.

- *Sharon Yergeau, Agriculture, Forestry and Waste (AFW)*
  - It was clarified that the term "sequestration" as understood by this Working Group is related to the carbon stored and taken in by in the existing forested and agricultural lands, as opposed to the active collection and storage of CO_2 in geological depositories. The latter process is more consistent with "sequestration" when discussed in an electric generation context.

- The technical consulting team requested that all Working Groups consider what datasets would be needed to quantify potential reductions that could be achieved by specific actions and where these datasets might be located. The recent Regional Greenhouse Gas Initiative conference regarding forest management and organized by Hubbard Brook Research Foundation was cited as an information source.
- The need to look at this sector from complementary perspectives was cited. This includes looking for where the greatest net gains in emission reductions can be achieved as well as by the maintenance of those existing strong positives (e.g., the existing sequestration capacity of the forests).
- There was a suggestion to consider how the existing upgrades that are due to occur at wastewater treatment plants could be used to shift to anaerobic waste treatment processes. The Stonyfield Farms plant demonstrates the considerable emission reductions and cost savings (relative to aerobic waste treatment processes) despite being a relatively small treatment plant.
- **Methane capture should not be restricted to AFW but should be considered in each category, including creation of statewide initiatives.**

- *Joe Fontaine, Electric Generation and Usage (EGU)*
  - There was a question about adopting Carbon Capture and Sequestration as an action. It was noted that this was identified as a compliance option.
  - There was a question regarding whether there had been discussion of a decentralized electrical system.
  - There was interest in looking at nuclear power as an option. The Chair of the Task Force suggested that the theoretical potential of all options should be identified, including analysis of their feasibility.
  - The definitions of "biomass" and "renewables" were discussed and it was agreed to carry the statutory definitions of these terms unless they are specifically broadened as part of a developed action by the Working Group.
  - It was suggested that Forward Capacity Market (FCM) approaches should be considered as a means to drive energy efficiency and demand response in the state.
  - It was further suggested that there should be a consideration of what can be done with existing renewable technologies as well as what advances must be made to achieve further reductions with existing technologies.

- *Kathy Brockett, Government Leadership and Action (GLA)*
  - To facilitate the adoption of actions by the state, it was suggested that the state should track not only its emissions but also its energy costs so that it could show the fiscal benefits of adopting these measures.
  - In response to the goal to achieve carbon neutrality, it was suggested that there may be more desirable terms to use than "carbon neutral." It is better to look at specific actions and targets to achieve them because carbon neutrality is a somewhat nebulous concept.
  - Guidelines concerning publicly funded buildings should include consideration of location, as it drives transportation-based emissions (e.g., schools).
  - The state's decision making processes could be evaluated to determine how they could be streamlined to allow the state to act in a manner that is most energy

efficient and lowers the carbon intensity of its actions. The commenter was pointing out that the state's decision-making process could be an obstacle in itself.

- *Michele Andy, Residential, Commercial and Industrial (RCI)*
  - It was clarified that the funding for some of the actions may come from sources such as a system benefits charge (SBC) or from the Regional Greenhouse Gas Initiative (RGGI) Auction Funds.
  - For the thermal renewable and low CO_2-emitting systems, it was suggested that we should quantify the theoretical emission reductions achievable from each specific technology.
  - The RCI group did request that the Task Force identify what the baseline emissions data would be so that they could better understand what they are trying to achieve based on what they are measuring from.
    - **Later in the meeting the Task Force identified <u>1990</u> as being the reference year for New Hampshire emissions.**
  - There was a point made that the Working Group should also consider how the state should be allocating its resources to displace the maximum CO_2 emissions.
    - For example, should the state's biomass be used to create ethanol for transportation fuel OR should the same biomass be used to heat homes to reduce oil consumption.

- *Becky Ohler and Carolyn Russell, Transportation and Land Use (TLU)*
  - There was a question regarding the use of tolls and the nature of constitutional problems with this how funding can be allocated.
  - Responding to the comments on the tolls, congestion pricing was noted as being considered in the broader categories of "*Incentives/Disincentives to Reduce Travel Demand.*"

Task Force Discussion

The following notes summarize the points made throughout the Working Lunch and the Goal and Process discussions held by the Task Force.

- Observations made by George Gantz, Unitil (*had to leave early*)
  - Other voices that should be acknowledged in this discussion:
    - Skeptic point of view not represented on the Task Force or in the Working Groups that address the underlying science or the difficulty of mitigating the impacts of climate change.
    - Cost/benefit advocates that debate the cost of changing now versus changing in the long-term.
    - The debate concerning the impact that actions may have on the poor (e.g., denied access to low cost fuel sources like coal) and cause them to bear a disproportionate burden of the cost.

- Methodologies and Deliverables Outlined by Carbon Solutions New England (CSNE)
  - New Hampshire's 1990 greenhouse gas emissions levels will be used as the reference point for the Action Plan.
  - Future projections of emissions have been and will be conducted by establishing a trend line for historical emission levels and then continuing that trend into the future.

- The CO_2 emission reduction for each option will be a calculation of the difference between the "business-as-usual" (BAU) scenario and the estimated emissions associated with an action.
- The economic analysis will be strategy-based and will provide: (1) projections of the direct costs of program and policy implementation; and (2) an analysis of who pays for and who benefits from implementation.
- A Task Force member noted that CSNE may only be able to evaluate the impact of sets of policies rather than the impact of individual actions.
- DES staff noted that that sufficient money does not currently exist to perform comprehensive economic modeling of the final plan.

- Discussion of the Task Force Role:
  - The Task Force will seek to identify those mitigation actions, whose area of impact overlap (and were not identified by the Working Groups), and request that CSNE provided additional analysis on this interaction.[1]
  - The process that the Task Force will use to determine which actions will be in the final plan has not yet been developed. This will require the identification and discussion of a consensus-based process. An option may be to write a plan that highlights those actions that are high consensus and those that are low or lower consensus.
  - The Task Force may need to consider how to evaluate the cost of doing nothing so as to provide a better understanding of the relative costs of adopting a specific action or the entire plan.[1]
  - The Task Force will determine how to weigh the various factors (e.g., statutory/regulatory, economic, technical, social etc) and in an integrated fashion, but will rely on the Working Groups to raise the issues related to feasibility and impact.[1]
  - Specific to Adaptation, the Task Force may look at the potential to reduce vulnerability as an evaluation criteria as opposed to CO_2 emissions. Numerous epidemiological studies exist which can be drawn on in this regard. Increasing ecological resilience in addition to increasing physical resistance to change should also be considered.
  - The cost-benefit analyses will have explicit assumptions that accompany them. The Task Force needs to review the assumptions and make sure that they are comfortable with them. Where possible, sensitivity analyses relative to the costs will be conducted.

[1] There needs to be a discussion of whether these are practical given the time frame.

- Discussion of the Task Force's Goal Development Process
  See the attached Action Plan Development Process and flowchart suggested by Commissioner Burack.

  General Conclusion: The Task Force members were in general agreement concerning the goal development process proposed by the Chair.

  Task Force Comments
  - The goal discussion should be fact-based.
  - The process should consider the goals of the surrounding states as well as the entire region in order to be consistent.
  - The goals should be also assessed in relation to global goals.
  - The Task Force should consider setting goals consistent with attaining global CO_2 concentrations of 450 ppm as at this level certain triggers are anticipated to occur.
  - The goal discussion should include consideration of scientific input/data from the IPCC and other sources.
  - The Task Force should consider maximizing emission reductions as a means to make the state more competitive. The California (stable kWh per capita) and the Stonyfield examples should be highlighted in this regard.

- Discussion of the Task Force's Plan Development Process
  See the attached Action Plan Development Process and flowchart suggested by Commissioner Burack.

  General Conclusion: There was general agreement that the process outlined would work well. A few changes were made to the proposed flowchart to refine the process and increase public and stakeholder engagement.

  Task Force Comments
  - The Task Force and Working Groups need to consider how to engage the stakeholders and communities that will be affected by actions who are not already engaged in the process.
  - The Task Force also needs to consider how to make sure the public has substantive input on the process. This could include:
    - Expanding the originally scheduled public hearings beyond July 7^{th} – 10^{th} ;
    - Allowing a written comment period that will extend to August 1^{st};
    - Communicate to community green teams, local energy committees and chambers and through the Carbon Coalition, and;
    - Using the existing state web resources more effectively to communicate:
      - the meeting and conference call dates, times and locations;
      - the outcomes of those meetings; and
      - the contact for public comments.

- Directions to Working Groups
  See the attached revised Action Evaluation Criteria template and proposed Final Action Submission Template (These versions include modifications made to address comments from the Task Force).

  General Conclusion: The Task Force generally felt that the Working Groups were focusing on appropriate evaluation criteria and that the policy design template was comprehensive. The Task Force requested the addition of a few specific items to the *Final Action Submission Template* to enable the holistic appraisal of each action.

  Working Group Goal and Action Development
  - Goal and Action Identification
    - It was suggested that there should be a consideration of what can be done with existing technology as well as what advances must be made to achieve further reductions.
    - The Working Groups should identify a very concrete set of all the actions that can be implemented right now to achieve reductions in the short-, medium- and/or long-term.
    - The Working Groups should further identify those actions that would achieve further short-, medium- and/or long-term reductions once specific obstacles (e.g., technical, legal, statutory/regulatory, procedural and/or economic) are addressed.
    - Leave open the option to re-evaluate existing programs in order to determine if they need to be expanded or if their dedicated resources would be better used if reallocated to a new or another existing program.
    - The Working Groups should consider what trends and opportunities are occurring regionally, nationally and internationally that may pose significant future opportunities for New Hampshire (e.g., solar farms in Australia and Spain). For those actions that are not achievable now, identify what obstacles stand in their way and how they can be addressed.
    - The Working Groups should continue to communicate with each other and "cross-fertilize" so as to avoid duplicated efforts and to improve consistency of actions.

  - Working Group Communication with CSNE
    - Working Groups will provide the policy descriptions to CSNE for actions of high interest. These actions can include both have high and low feasibility options.
    - Working Groups are asked to recognize that the CSNE team is relying on the Working Groups in large part to provide background data and draft policy designs in order to quantify the CO_2 emission reduction, cost of implementation and cost savings.
    - The Working Groups will work with CSNE to conduct some sensitivity analyses for individual actions by developing alternative assumptions for actions in an iterative fashion.

- Stakeholder Engagement
  - The parties that are identified as those who will pay, implement and benefit from an action need to be engaged at some point in the process to gather their feedback.

- Final Goal and Action Submission
  - In addition to the items contained on the *Final Action Submission Template*, the final action submissions would also include:
    - A clarification of the economic and non-dollar costs and benefits associated with each action;
    - A clarification of "parties affected" to include:
      - Parties responsible;
      - Parties that pay, and;
      - Parties that benefit;
    - An evaluation of an action's social feasibility in addition to the technical, economic, statutory/regulatory and social feasibility;
    - Documentation of similar programs and policies already in place (e.g., energy efficiency programs) to provide an incremental comparison of the costs and benefits of new programs and policies compared to the existing efforts;
    - Identification of how new actions would expand efforts across sectors and create synergies if relevant, and;
    - Identification of case studies that relate to the specific actions. These cases studies could be helpful to communities and businesses and increase readability of the final report.

- Deliverables due to the Task Force at May 19th meeting
  - DES will:
    - Prepare a mock Climate Change Action Plan for comment by the Task Force regarding layout and content presentation.
    - Identify and propose a consensus-building process for final decision-making for review and comment at the next Task Force meeting.
    - Develop an Evaluation Criteria and Final Action Submission Template for the Adaptation Working Group (incorporating the existing Adaptation Working Group's focus on reducing vulnerability from a qualitative perspective).
    - Prepare a summary of northeastern climate change action goals and science related to climate-stabilizing global atmospheric CO_2 concentrations.

Public Comments

- Al-Azad Iqbal, PUC
  - The analysis of cost/benefits need to take into account the "certainty" of outcomes.

- Doug Bogen, Clean Water Action
  - Concerned about using a consensus-building process as it may result in the lowest common denominator. Recommends not getting bogged down in the decision-making process.

- Should consider the polling that has been done by other parties for the state regarding this issue and not just the public input at the listening sessions.
- Don't allow obstacles to stand in the way of strong action during feasibility debate. Consider the debate over replacing MBTE with ethanol, in which it was argued that it was not feasible to replace MBTE, but now ethanol is in use in southeastern NH.
- Create a few strong recommendations that we should do, as opposed to a range of things that could be done, as was documented in the NH Climate Change Challenge document (2001).

- Matt Frades, UNH CSNE
  - Need to consider the interaction between actions such as the impact that vehicle emissions reductions would have when combined with a reduction in vehicle miles traveled.
  - Also need to recognize that solutions are not mutually exclusive. Separate actions can actually capture the same reductions.

- Ned Raynolds, Union of Concerned Scientists and the City of Portsmouth
  - Need to consider the gains that have been made in science, when considering the goals/targets that need to be achieved to stabilize the climate. Noted the document, A Target for U.S. Emissions, which was distributed at the first Task Force meeting in the back of the Task Force members' binders.
  - As an update of other climate and energy efforts within the state, he noted that there is a website, put together by Clay Mitchell of Epping (as part of the Carbon Coalition's Local Energy Committee Working Group) that has information concerning the Local Energy Committees of 10-12 towns. The pages for each town can be updated (Wiki format) and new towns can be added at any time.

Adjournment

The meeting adjourned at 3:00 PM, following which some members of the Task Force and public toured the Stonyfield Farm production facility in Londonderry, NH.